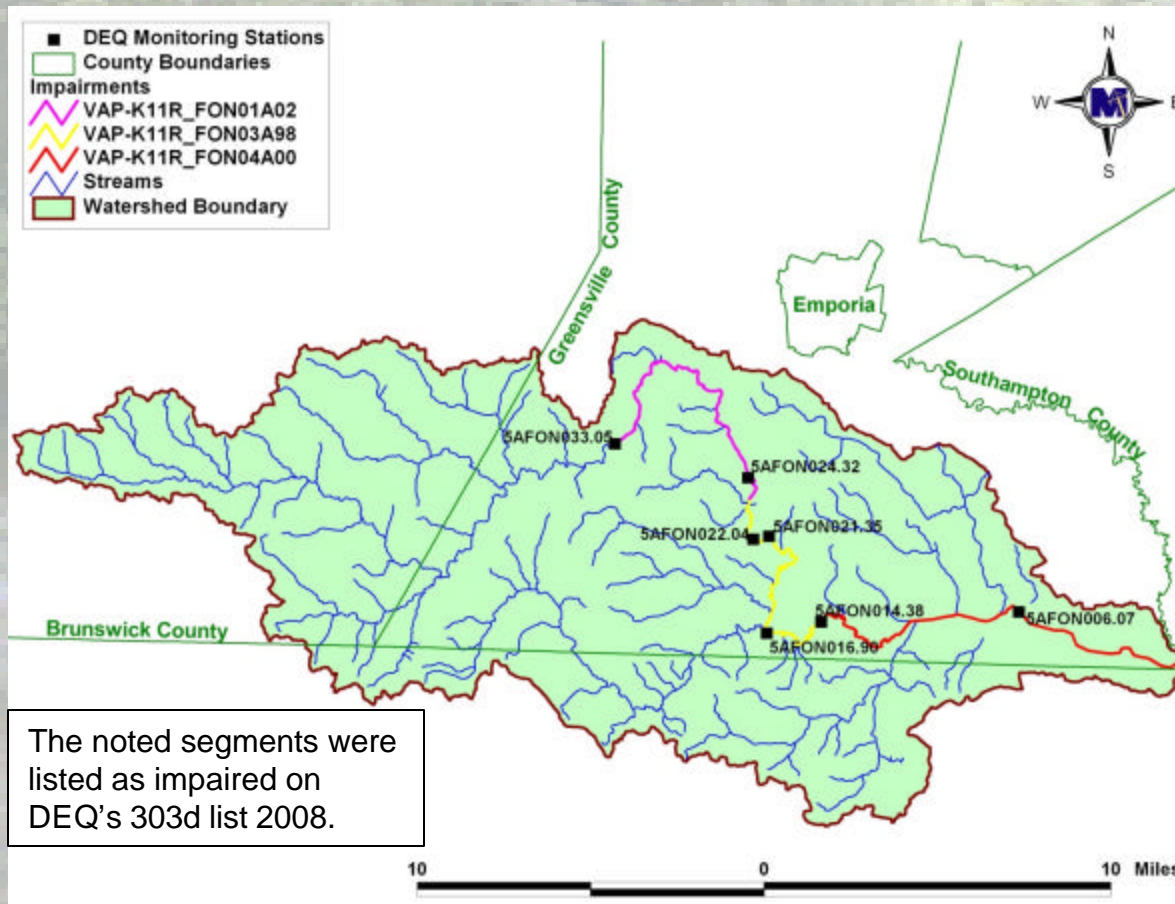


Bacteria TMDL Development for Fontaine Creek (aka Fountain Creek) in Greensville and Brunswick Counties

Tributary of the Meherrin River



Final Public Meetings

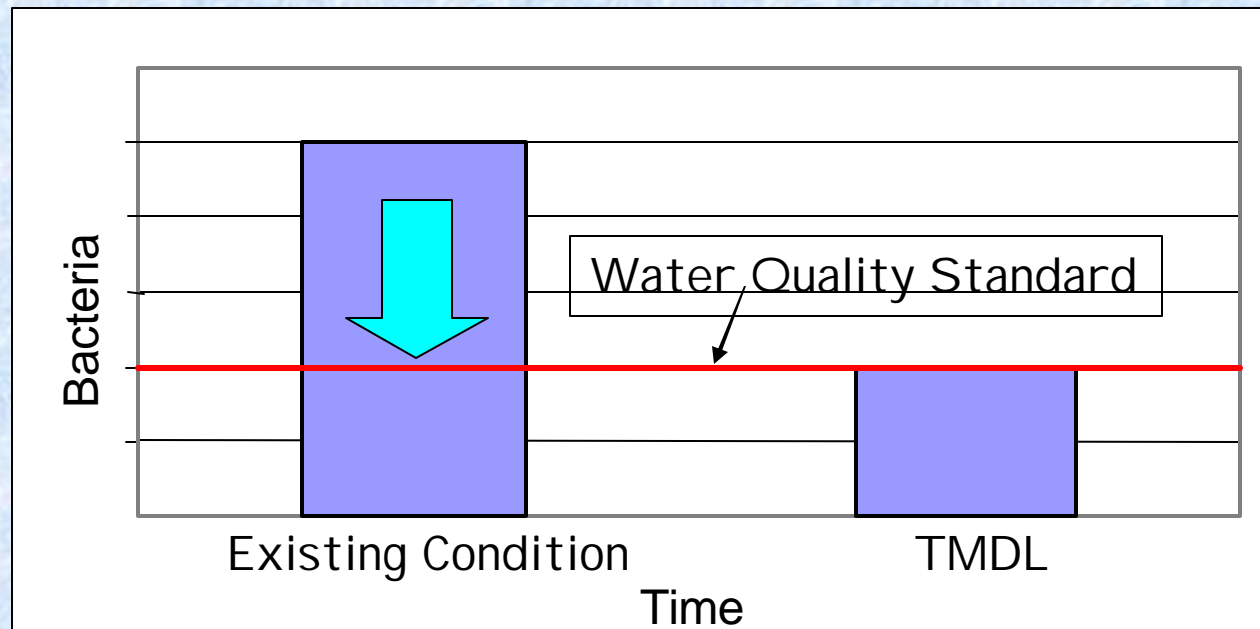
June 28, 2010 Emporia, VA



What is a TMDL?

TMDL = Total Maximum Daily Load = maximum amount of a pollutant that can exist in a waterbody without violating water quality standards (WQS). An example = $2.98E+12$

WQS = numeric or narrative limits on pollutants that ensure the protection of human health and of aquatic life

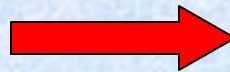


Reducing existing bacteria load to the TMDL end point load is expected to restore water quality.

Why are TMDL studies necessary?

- TMDLs must be developed for water bodies that do not meet water quality standards for their designated uses (Clean Water Act 1972)

- Primary Contact (Swimming)



***E.coli* indicator organism:**

126 cfu/100ml Geometric Mean

235 cfu/100ml Instantaneous Max

- Public Water Supply
 - Aquatic Life
 - Fish Consumption
 - Shellfish Consumption
 - Wildlife

- Waters are monitored by DEQ – those not meeting water quality standards are placed on an impaired waters list (303d list) published every 2 years as part of the “303d/305b Integrated Report”.

- As of 2008 ~1100 TMDLs are due in Virginia by 2020

In order to reduce bacteria in a watershed...

We need to know what sources of bacteria are in the watershed (and hopefully where it exists)....

Point Source – pollution discharged from pipes or outfalls (may be permitted or illicit)

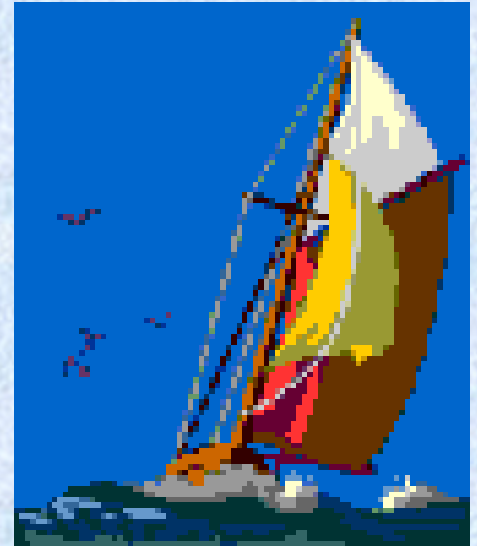
Non-point Source – pollution that originates from multiple sources over an area (runoff of pollution from land). Four main categories are human, livestock, pet, and wildlife.

During our first meeting May 26th we:

- ❑ Defined the watersheds and impairments
- ❑ Discussed DEQ & USGS bacteria monitoring data from stations in watershed
- ❑ Shared watershed land use information
- ❑ Told you what DEQ permits are in the watersheds (point sources)
- ❑ Showed our “first draft” of population estimates (non-point sources)
- ❑ BST (bacterial source tracking data)
- ❑ Asked for your public comments on this information (received 0 comments)

Virginia's TMDL Development

- ☑ TMDL study
 - ☐ Comment period then submit to EPA for approval
- ☐ Implementation Planning
- ☐ Implementation
- ☐ Post Monitor and Report on Progress



= = > * * Many opportunities for public participation! * *

Next Steps...

□ 30 Day Public Comment Period

***** Ends July 30th, 2010 *****

Send comments with name, address,
and telephone number to:

DEQ - Piedmont Regional Office

Attn: Margaret Smigo

4949-A Cox Road

Glen Allen, VA 23060

or email : Margaret.Smigo@deq.virginia.gov

Presenations available at:

<http://www.deq.virginia.gov/tmdl/mtgppt.html>

Draft Report available at:

<https://www.deq.virginia.gov/TMDLDataSearch/DraftReports.jsp>

Questions?

A brief description of John Fontaine – for whom the Creek is named, can be found at:

http://research.history.org/JDRLibrary/Special_Collections/SpecialCollectionsDocs/Fontaine1.cfm